## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

ORDER NO. R5-2003-0086

## REQUIRING THE CITY OF YUBA CITY WASTEWATER TREATMENT FACILITY TO CEASE AND DESIST FROM DISCHARGING CONTRARY TO REQUIREMENTS

The California Regional Water Quality Control Board, Central Valley Region, (hereafter referred to as "Regional Board") finds:

- 1. On 6 June 2003, the Regional Board adopted Waste Discharge Requirements (WDR) Order No. R5-2003-0085, for the City of Yuba City's (Discharger) Wastewater Treatment Facility. WDR Order No. R5-2003-0085 regulates the discharge of approximately 6.0 million gallons per day (mgd) of treated domestic and industrial wastewater to the Feather River. The design flow of the facility is 7.0 mgd.
- 2. WDR Order No. R5-2003-0085 contains Effluent Limitations for discharges from the diffuser outfall into the Feather River for organochlorine pesticides, aluminum, ammonia, diazinon, ethion, iron, manganese, and molybdenum as contained in B.1, which reads in part as follows:

		Instantaneous
"Constituents	<u>Units</u>	<u>Maximum</u>
Organochlorine Pesticides	$\mu$ g/ $l$	$\mathrm{ND}^{45}$
Ethion	$\mu$ g/ $l$	0.02

The Non-Detectable (ND) limitation applies to each individual pesticide. No individual pesticide may be present in the discharge at detectable concentrations. The Discharger shall use EPA standard analytical techniques with the lowest possible detectable level for organochlorine pesticides with a maximum acceptable detection level of 0.05 μg/l.

		Average	Average	Average	Average
<u>Constituents</u>	<u>Units</u>	<u>Monthly</u>	<u>4-Day</u>	<u>Daily</u>	<u>1-Hour</u>
Aluminum <sup>1</sup>	$\mu$ g/ $l$	$78^{2}$	$87^{2}$	$120^{2}$	
	lbs/day <sup>3</sup>	4.6	5.1	7.0	
Ammonia	mg/l	Attachment B			Attachment B
(as N)	lbs/day <sup>4</sup>	5			

Acid-soluble or total

To be ascertained by a 24-hour composite

Based upon a design treatment capacity of 7.0 mgd [ $x \mu g/l X (1 mg/1000 \mu g) X 8.345 X 7.0 mgd = y lbs/day$ ]

Based upon a design treatment capacity of 7.0 mgd (x mg/l X 8.345 X 7.0 mgd = y lbs/day)

The mass limit (lb/day) for ammonia shall be equal to the concentration limit (from Attachments) multiplied by the design flow of 7.0 mgd and the unit conversion factor of 8.345 (see footnote 1 for equation).

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		Average	Average	Average	Average
<u>Constituents</u>	<u>Units</u>	Monthly	4-Day	<u>Daily</u>	1-Hour
Diazinon	$\mu$ g/ $l$	$0.04^{2}$		$0.08^{2}$	
	lbs/day <sup>3</sup>	0.002		0.005	
Iron	$\mu$ g/ $l$	$300^{2}$			
(total recoverable)	lbs/day <sup>3</sup>	20			
Manganese	$\mu$ g/ $l$	$50^{2}$			
(total recoverable)	lbs/day <sup>3</sup>	3			
Molybdenum	$\mu$ g/ $l$	$10^{2}$			
(total recoverable)	lbs/day <sup>3</sup>	0.6			**

3. WDR Order No. R5-2003-0085 contains an Effluent Limitation for electrical conductivity for discharges from the diffuser outfall into the Feather River as contained in B.7, which reads as follows:

"The 30-day 90<sup>th</sup> percentile effluent electrical conductivity shall not exceed 830 µmhos/cm."

4. WDR Order No. R5-2003-0085 contains Effluent Limitations for discharges from the disposal ponds into the Feather River for organochlorine pesticides, aluminum, ammonia, diazinon, ethion, iron, manganese, and molybdenum as contained in D.1, which reads in part as follows:

		Average	Average	Instantaneous
"Constituents	<u>Units</u>	<u>Daily</u>	<u>1-Hour</u>	<u>Maximum</u>
Aluminum <sup>1</sup>	$\mu \mathrm{g}/l$	120		
	lbs/day <sup>2</sup>	7.0		
Ammonia	${ m mg}/l$		Attachment B	
(as N)	lbs/day <sup>3</sup>			
Diazinon	$\mu$ g/ $l$	0.08		
	lbs/day <sup>3</sup>	0.005		
Ethion	$\mu$ g/ $l$			0.02
	lbs/day <sup>3</sup>			
Organochlorine	$\mu$ g/ $l$			$\mathrm{ND}^4$
Pesticides	lbs/day <sup>3</sup>			

Acid-soluble or total

Based upon a design treatment capacity of 7.0 mgd [ $x \mu g/l x (1 mg/1000 \mu g) x 8.345 x 7.0 mgd = y lbs/day$ ]

Based upon a design treatment capacity of 7.0 mgd (x mg/l X 8.345 X 7.0 mgd = y lbs/day)

The Non-Detectable (ND) limitation applies to each individual pesticide. No individual pesticide may be present in the discharge at detectable concentrations. The Discharger shall use EPA standard analytical techniques with the lowest possible detectable level for organochlorine pesticides with a maximum acceptable detection level of  $0.05 \, \mu g/l$ ."

5. Maximum observed constituent concentrations in the effluent taken from analytical laboratory reports submitted by the Discharger are shown below:

<u>Constituent</u>	Sample <u>Date</u>	Concentration $(\mu g/l)$	<u>Constituent</u>	Sample <u>Date</u>	Concentration $(\mu g/l)$
Organochlorine Pesticides	3/18/1994	0.13 (lindane)	Iron Manganese Molybdenum Electrical Conductivity	7/2/2002	330
Ethion	7/2/2002	0.17		4/8/2002	430
Aluminum	1/25/2001	562		8/2/2000	35
Diazinon	5/6/2002	0.33		1/3/2003	946 µmhos/cm <sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Maximum 30-day 90<sup>th</sup> percentile

- 6. The Discharger currently does not nitrify its wastewater. Failure to nitrify the wastewater would result in concentrations of ammonia that exceed Effluent Limitations.
- 7. In order to consistently comply with the ammonia Effluent Limitations, nitrification of the wastewater is necessary.
- 8. Based on the above Findings, this discharge represents a threatened discharge of waste in violation of WDR Order No. R5-2003-0085, Effluent Limitations for organochlorine pesticides, aluminum, ammonia, diazinon, electrical conductivity, ethion, iron, manganese, and molybdenum.
- 9. In accordance with California Water Code (CWC) Section 13385(j)(3), the Regional Board finds that, based upon operational capabilities, the Discharger is not able to consistently comply with the organochlorine pesticides, aluminum, ammonia, diazinon, electrical conductivity, ethion, iron, manganese, and molybdenum effluent limitations. The organochlorine pesticides, aluminum, ammonia, diazinon, electrical conductivity, ethion, iron, manganese, and molybdenum limitations are new requirements that become applicable to the permit after the effective date of adoption of the waste discharge requirements, and after 1 July 2000, for which new or modified control measures are necessary in order to comply with the limitation, and the new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days.

Since the time schedules for completion of actions necessary to achieve full compliance exceed one year, interim requirements and dates for their achievement are included in this Order. This time schedule does not exceed five years. Treatment actions can be taken to correct the violations that would otherwise be subject to mandatory penalties under California Water Code section 13385(h) and (i), and the Discharger can take reasonable measures to achieve compliance within five (5) years from the date the waste discharge requirements were required to be reviewed pursuant to Section 13380.

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California Water Code Section 13385(j)(3) requires the Discharger to prepare and implement a pollution prevention plan pursuant to Section 13263.3 of the California Water Code. A pollution prevention plan addresses only those constituents that can be effectively reduced by source control measures. Typically, ammonia cannot be significantly reduced through source control measures in domestic wastewater. However, because the treatment facility receives a significant portion of its hydraulic loading from nutrient-deficient industrial sources, the Discharger adds ammonium polyphosphate to the influent.

Compliance with this Order exempts the Discharger from mandatory minimum penalties for violations of effluent organochlorine pesticides, aluminum, ammonia, diazinon, electrical conductivity, ethion, iron, manganese, and molybdenum limitations only, in accordance with California Water Code Section 13385(j)(3).

- 10. On 6 June 2003, in Sacramento, California, after due notice to the Discharger and all other affected persons, the Regional Board conducted a public hearing at which evidence was received to consider a Cease and Desist Order to establish a time schedule to achieve compliance with waste discharge requirements.
- 11. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000, *et seq.*), in accordance with Section 15321 (a)(2), Title 14, California Code of Regulations.
- 12. Any person adversely affected by this action of the Regional Board may petition the State Water Resources Control Board (State Board) to review the action. The petition must be received by the State Board Office of the Chief Counsel, P.O. Box 100, Sacramento, CA, 95812-0100, within 30 days of the date on which the action was taken. Copies of the law and regulations applicable to filing petitions will be provided on request.

## IT IS HEREBY ORDERED THAT:

- 1. The City of Yuba City shall cease and desist from discharging and threatening to discharge contrary to Waste Discharge Requirements Order No. R5-2003-0085, Effluent Limitations B.1, B.7, and D.1 for organochlorine pesticides, aluminum, ammonia, diazinon, electrical conductivity, ethion, iron, manganese, and molybdenum.
- 2. The City of Yuba City shall comply with the following time schedule to assure compliance with the organochlorine pesticides, aluminum, ammonia, diazinon, electrical conductivity, ethion, iron, manganese, and molybdenum Effluent Limitations contained in Waste Discharge Requirements Order No. R5-2003-0085 as described in the above Findings:

SUTTER COUNTY

Task
Progress Report/Implementation Schedule
Submit Pollution Prevention Plan

Compliance Date

1 March 2004
31 May 2004

Progress Reports<sup>2</sup> 30 June (beginning in 2004) and 31 December

of each year

Achieve Full Compliance 1 March 2008

<sup>1</sup> The Pollution Prevention Plan shall be prepared for all constituents listed above and shall meet the requirements specified in California Water Code Section 13263.

- 3. Until full compliance with Waste Discharge Requirements Order No. R5-2003-0085, Effluent Limitations B.1, B.7, and D.1 is achieved, the Discharger shall operate the treatment plant in a nitrification mode to the maximum extent practicable.
- 4. If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may apply to the Attorney General for judicial enforcement or issue a complaint for Administrative Civil Liability.

I, THOMAS R. PINKOS, Executive Officer, do herby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 6 June 2003.

THOMAS R. PINKOS, Executive Officer

<sup>&</sup>lt;sup>2</sup> The progress reports shall detail what steps have been implemented towards achieving compliance with waste discharge requirements, including construction progress, evaluate the effectiveness of the implemented measures and assess whether additional measures are necessary to meet the time schedule.